Notice of Allowability	Application No.	Applicant(s)	
	09/970,076	YOUNG ET AL.	
	Examiner	Art Unit	
	N. M. Minnifield	1645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *10/11/05 and 12/21/05*.

2. ☒ The allowed claim(s) is/are *27-31, 11, 12, 34, 16, 35, 19-21, 36 now renumbered 1-14 respectively*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *attached* . 6/9/05 12/21/05
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

CLEAN COPY OF CLAIMS

11. A vector comprising the polynucleotide of claim 27.

12. A vector comprising a non-native expression control sequence operably linked to a polynucleotide selected from the group consisting of the polynucleotide of claim 27 and a polynucleotide of claim 30.

13. A host cell comprising a non-native expression control sequence operably linked to a polynucleotide selected from the group consisting of the polynucleotide of claim 27 and a polynucleotide of claim 30.

19. A method for producing an anthrax toxin receptor, the method comprising the steps of:

transcribing a polynucleotide operably linked to an upstream expression control sequence, wherein the polynucleotide is selected from the group consisting of the polynucleotide of claim 27 and a polynucleotide of claim 30 to produce an mRNA; and

translating the mRNA to produce the anthrax toxin receptor.

20. A method as claimed in Claim 19, wherein the polynucleotide is operably linked to the expression control sequence in an expression vector, and wherein the expression vector is delivered into a host cell, the expression control sequence being operable in the host cell.

21. A method as claimed in Claim 19, wherein at least one of the transcribing and translating steps are performed *in vitro*.

27. An isolated polynucleotide or complement thereof, the polynucleotide comprising a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:2.

28. An isolated polynucleotide or complement thereof, the polynucleotide encoding an the amino acid sequence selected from the group consisting of SEQ ID NO:2, amino acids 27-321 of SEQ ID NO:2, and amino acids 28-320 of SEQ ID NO:2.

29. The isolated polynucleotide of claim 27 comprising SEQ ID NO:1 from position 104 to 1207 or the complement thereof.

30. An isolated polynucleotide or complement thereof, the polynucleotide encoding the amino acid sequence selected from the group consisting of amino acids 41-227 of SEQ ID NO:2, amino acids 42-222 of SEQ ID NO:2, and amino acids 44-216 of SEQ ID NO:2.

31. The isolated polynucleotide of claim 30 wherein the polynucleotide encodes an the amino acid sequence selected from the group consisting of amino acids 41-227 of SEQ ID NO:2 and amino acids 42-222 of SEQ ID NO:2.

34. The vector of claim 12, wherein the polynucleotide is selected from the group consisting of the polynucleotide of claim 27 and a polynucleotide of claim 30.

35. The host cell of claim 13, wherein the polynucleotide is selected from the group consisting of the polynucleotide of claim 27 and a polynucleotide of claim 30.

36. The method of claim 19, wherein the polynucleotide is selected from the group consisting of the polynucleotide of claim 27 and a polynucleotide of claim 30.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Bennett Berson, 37094 on December 21, 2005.

2. Applicants' amendment after final filed October 11, 2005 is acknowledged and has been entered. Claims 1-10. 14-18 and 22-26 have been canceled. Claims 27, 28 and 30-32 have been amended. Claims 11-13, 19-21 and 27-36 are now pending in the present application. All rejections have been withdrawn in view of the October 11, 2005 amendment to the claims as well as the amendment to the claims set forth below in this Examiner's amendment. It noted that Applicants gave approval to cancel claims 32 and 33 without prejudice in an effort to put this application in condition for allowance.

3. The application has been amended as follows:

1-10. (Canceled)

11. (Currently amended) A vector comprising [a] <u>the</u> polynucleotide of claim 27.

12. (Currently amended) A vector comprising a non-native expression control sequence operably linked to a polynucleotide selected from the group consisting of [a] the polynucleotide of claim 27[,] and a polynucleotide of claim 30[, and a polynucleotide of claim 32].

13. (Currently amended) A host cell comprising a non-native expression control sequence operably linked to a polynucleotide selected from the group consisting of [a] the polynucleotide of claim 27[,] and a polynucleotide of claim 30[, and a polynucleotide of claim 32].

14-18. (Canceled)

19. (Currently amended) A method for producing an anthrax toxin receptor, the method comprising the steps of:

transcribing a polynucleotide operably linked to an upstream expression control sequence, wherein the polynucleotide is selected from the group consisting of [a] the polynucleotide of claim 27[,] and a polynucleotide of claim 30[, and a polynucleotide of claim 32], to produce an mRNA; and

translating the mRNA to produce the anthrax toxin receptor.

20. (Original) A method as claimed in Claim 19, wherein the polynucleotide is operably linked to the expression control sequence in an expression vector, and wherein the expression vector is delivered into a host cell, the expression control sequence being operable in the host cell.

21. (Original) A method as claimed in Claim 19, wherein at least one of the transcribing and translating steps are performed *in vitro*.

22-26. (Canceled)

27. (Previously presented) An isolated polynucleotide or complement thereof, the polynucleotide comprising a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:2.

28. (Previously presented) An isolated polynucleotide or complement thereof, the polynucleotide encoding an the amino acid sequence selected from the group consisting of SEQ ID NO:2, amino acids 27-321 of SEQ ID NO:2, and amino acids 28-320 of SEQ ID NO:2.

29. (Previously presented) The isolated polynucleotide of claim 27 comprising SEQ ID NO:1 from position 104 to 1207 or the complement thereof.

30. (Previously presented) An isolated polynucleotide or complement thereof, the polynucleotide encoding the amino acid sequence selected from the group consisting of amino acids 41-227 of SEQ ID NO:2, amino acids 42-222 of SEQ ID NO:2, and amino acids 44-216 of SEQ ID NO:2.

31. (Previously presented) The isolated polynucleotide of claim 30 wherein the polynucleotide encodes an the amino acid sequence selected from the

group consisting of amino acids 41-227 of SEQ ID NO:2 and amino acids 42-222 of SEQ ID NO:2.

32-33. (Canceled)

34. (Currently amended) The vector of claim 12, wherein the polynucleotide is selected from the group consisting of [a] the polynucleotide of claim 27[,] and a polynucleotide of claim 30[, and a polynucleotide of claim 33].

35. (Currently amended) The host cell of claim 13, wherein the polynucleotide is selected from the group consisting of [a] the polynucleotide of claim 27[,] and a polynucleotide of claim 30[, and a polynucleotide of claim 33].

36. (Currently amended) The method of claim 19, wherein the polynucleotide is selected from the group consisting of [a] the polynucleotide of claim 27[,] and a polynucleotide of claim 30[, and a polynucleotide of claim 33].

4. Claims 27-31, 11, 12, 34, 13, 35, 19-21 and 36 have been allowed and renumbered 1-14 respectively.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to N. M. Minnifield whose telephone number is 571-272-0860. The examiner can normally be reached on M-F (8:00-5:30) Second Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynette R.F. Smith can be reached on 571-272-0864. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/N. M. Minnifield/
Primary Examiner
Art Unit 1645

NMM
December 21, 2005